In 2001, the WorldCom FTB Cable Installation project was constructed. This project involved construction of five new horizontal bore pipes from the Sandspit Road parking lot to create additional cable capacity at the site. New cable routes were also constructed northeast along Pecho Valley Road to the WorldCom Telecommunications Facility in Los Osos, and east to San Luis Obispo.

2. Applicable Conditions of Approval

County Development Plan/Coastal Development Permit (D900132D) and ED90-848 allowed construction of the original AT&T HAW-5 fiber optic conduit system along the ridge route to occur in 1992. Construction of the cable landing and installation of cable along the ridge route was included in these original permits. The need for future installation of cable into existing bores or conduits was considered when the County evaluated and permitted the HAW-5 project, and the mitigation measures identified within the D900132D conditions of approval were designed to cover such activities. This permit and the accompanying certified CEQA documentation (ED90-848) evaluated multiple cable pull operations (such as currently proposed), over the life of the cable landing, conduit route, and cable station.

The 1994 TPC-5 cable installation activities were conducted under the D900132D conditions of approval, following review by County staff. The review determined that the cable pull was part of the original HAW-5 permit process, the proposed activities were consistent with the conditions of approval, and that additional discretionary review was therefore not necessary.

The 1998 China-US cable pull was also conducted under the D900132D conditions of approval, without additional discretionary review by the County. The 1998 China-US cable pull involved pulling two fiber and two power cables along the existing ridge route, and was very similar to the terrestrial portion of the currently proposed Asia America Gateway project.

County Development Plan/Coastal Development Permit (D970257D) and the 2000 WorldCom EIR allowed subsequent fiber optic cable installation activities in Montana de Oro and the Los Osos Valley. These activities were subject to detailed mitigation measures, and a Morro shoulderband snail (*Helminthoglypta walkeriana*) concurrence agreement issued by the U.S. Fish and Wildlife Service (USFWS). The 2000 WorldCom Conditions of Approval do not apply to the proposed AAG project.

Consultation with County of San Luis Obispo Department of Planning and Building staff indicates that the County considers the existing CDP (D900132D) as still applicable, and would not require a new or revised Coastal Development Permit (CDP) unless the proposed Asia America Gateway project cannot meet the requirements of the original conditions of approval (McMasters, 2008). The original conditions were designed to allow initial construction (e.g., trenching, manhole installation, and general construction of the conduit system along the ridge route) and long-term maintenance and subsequent installation of fiber optic cables into the conduit system, and are therefore adequate to allow a cable installation project to proceed.

II. SURVEY METHODOLOGY

A. SURVEY FOCUS AND ANALYSIS

General reconnaissance-level survey efforts were conducted for plant communities and sensitive plant and wildlife species potentially present within and immediately adjacent to the ROW and proposed laydown areas, and along access roads proposed for use. Survey efforts reviewed and updated existing data gathered by previous biological analysis performed for the 1990 and 1998 AT&T projects, and the 2001 WorldCom EIR, and did not include complete floristic analysis or protocol-level surveys for terrestrial or aquatic wildlife species along the ROW. Given the information gathered during preparation of previous CEQA documents and project monitoring efforts, performance of protocol-level surveys would not be likely to result in additional sensitive species occurrences; particularly if the project is implemented according to the existing Conditions of Approval established for the HAW-5 project.

B. LITERATURE REVIEW

During the literature review portion of this study, a query of the California Department of Fish and Game (CDFG) California Natural Diversity Data Base (CNDDB) was conducted to identify reported occurrences of special-status plant and animal species, and sensitive habitats, which have been documented within the San Luis Obispo U.S. Geological Survey (USGS) 7.5-minute quadrangle. In addition, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Plants of California (2008), was reviewed to provide additional information on rare plants that are known to occur in the area.

C. FIELD SURVEYS

Field surveys of the ROW and all access roads proposed for use during the project were conducted by Morro Group/SWCA biologists Bob Sloan and Sarah Millus during May and June, 2008. The field surveys characterized the existing conditions within the ROW and access roads, and identified potential biological resources (e.g., regulated habitats, special-status species, sensitive habitats, oak impacts) that could be affected by the proposed project.

Plant communities and habitat types were classified according to the Preliminary Description of Terrestrial Natural Communities of California (Holland, 1986), and the CDFG List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base (CDFG, 2007). Plant species that were identifiable were classified based on The Jepson Manual: Higher Plants of California (Hickman, 1993) and Vascular Plants of San Luis Obispo County (Hoover, 1970). Although plant species observed were documented in order to characterize surrounding habitats, a full floristic list was not compiled as the surveys did not include the entire blooming period for many local species.

III. EXISTING CONDITIONS

The project area includes portions of Montana de Oro State Park, the Irish Hills, and the Los Osos Valley. Topography of the ROW is highly variable and includes coastal dunes, rolling hills, and steep slopes. Elevations range from near sea level in Montana de Oro to over 800 feet above sea level on peaks located south of Los Osos Valley Road. The ROW generally follows the ridgeline of the Irish Hills south of Los Osos Valley Road, and traverses a variety of major plant communities and residential, agricultural, and rural uses. The following sections describe the plant communities and wildlife habitats, and sensitive and regulated habitats found within immediate vicinity of the project ROW and access routes.

A. PLANT COMMUNITES AND WILDLIFE HABITATS

Plant communities and wildlife habitats within the project route were documented based on field surveys conducted by Morro Group/SWCA biologists. The survey area included habitat directly within and adjacent to the ROW, and the access roads proposed for use. The field surveys identified eight habitat types within the project area, including: 1) central dune scrub, 2) central maritime chaparral, 3) coastal scrub, 4) riparian habitat; 5) coast live oak woodland, 6) eucalyptus woodland, 7) annual grassland, and 8) ruderal/disturbed. The following is a description of each of these plant communities and wildlife habitats.

1. Central Dune Scrub

Central dune scrub communities are generally located inland from coastal foredune communities and open sandy beaches (Holland, 1986). This habitat is considered sensitive by the CDFG and the California Coastal Commission. Central dune scrub is primarily established on recent to ancient coastal sand dunes. Away from the coast, these communities typically integrate with chaparral, coast live oak woodland, or coastal sage scrub communities. Species composition is highly variable, but Central dune scrub communities generally contain high species diversity. Characteristic species include a variety of semi-woody shrubs such as mock heather (*Ericameria ericoides*), sand almond (*Prunus fasciculata* var. *punctata*), dune buckwheat (*Eriogonum parvifolium*), deerweed (*Lotus scoparius*), coastal silver lupine (*Lupinus chamissonis*), black sage (*Salvia mellifera*), and California sagebrush (*Artemisia californica*). Understory of central dune scrub communities is typically sparse and primarily comprised of various forbs and lichens. Characteristic understory species include California croton (*Croton californicus*), rush-rose (*Helianthemum scoparium*), California aster (*Lessingia filaginifolia*), and wedgeleaf horkelia (*Horkelia cuneata* ssp. *cuneata*). In some locations the invasive and non-native veldt grass (*Ehrharta calycina*) comprises a significant portion of the understory of central dune scrub.

Areas of central dune scrub are expected to support of variety of small mammal species such as Botta's pocket gopher, California mouse (*Peromyscus californicus*), and western harvest mouse *(Reithrodontomys megalotis).* Bird species that frequent, central dune scrub habitats of the project area include California towhee *(Pipilo crissalis),* rufous-sided towhee (*Pipilo erythropthalmus*), white-crowned sparrow (*Zonotrichia leucophrys*), wrentit (*Chamaea fasciata*), California thrasher (*Toxostoma redivivum*), and scrub jay (*Aphelocoma coerulescens*). Reptiles including southern alligator lizard (*Elgaria multicarinata*), western skink (*Eumeces skiltonianus*), and western fence lizard (*Sceloporus occidentalis*) are also expected to occur in central dune scrub habitats of the project area.

2. Central Maritime Chaparral

Central maritime chaparral communities occur in windswept coastal areas of central and northern California. This habitat is considered sensitive by the CDFG and the California Coastal Commission. In San Luis Obispo County, Central maritime chaparral is most often established on well-drained and stabilized sandy substrates near the coast, as well as on serpentine-derived soils. Central maritime chaparral communities are limited in distribution and typically form a mosaic with central dune scrub and coast live oak woodland. Understory within these areas is typically sparse and consists of a variety of forbs considered characteristic of dune scrub communities.

This community is dominated by stiffly branched, woody shrubs including Morro manzanita (*Arctostaphylos morroensis*), buckbrush (*Ceanothus cuneatus* var. *fascicularis*), black sage, and coffeeberry (*Rhamnus californica* ssp. *californica*). A variety of shrubs typical of central dune scrub communities, and numerous pygmy oaks (*Quercus agrifolia* var. *frutescens*) occur as part of chaparral habitat along the ROW. Central maritime chaparral habitat forms a dense shrub cover along the ROW between MH 90F and MH 96F.

Larger mammals such as bobcat *(Lynx rufus*), coyote (*Canis latrans*), and deer (*Odocoileus hemionus*) may occur in areas maritime chaparral located within the project area, along with many species found in Central dune scrub and coastal scrub habitats.

3. Central (Lucian) Coastal Scrub

Along the central coast, coastal sage scrub communities typically occur in pockets in the outer and inner southern coastal ranges and in scattered areas along the immediate coast. These communities typically integrate with a variety of habitat types including annual grassland, oak woodland, and chaparral communities. Species composition is highly variable and is dependent upon topography, soils, and slope aspect. Plants occurring in coastal sage scrub communities are characterized as aromatic, low-growing, and drought tolerant. Common plant species present include coyote brush (*Baccharis pilularis*), California sagebrush, sticky monkeyflower (*Mimulus aurantiacus*), poison oak (*Toxicodendron diversilobum*), and black sage. Understory within these communities is generally sparse and includes forbs such as plantain (*Plantago* sp.) and yarrow (*Achillea* sp.), and annual grass species. Along the project ROW, coastal sage scrub communities are found at low elevations on the coast and along steep slopes with shallow soil. Wildlife species found within central dune scrub and maritime chaparral habitats are also generally found in association with coastal scrub habitats. Portions of this community within Montana de Oro State Park provide habitat for the federally protected Morro shoulderband snail (*Helminthoglypta walkeriana*).

4. Riparian Habitat

Riparian communities are characterized as sparse to dense corridors of vegetation occurring adjacent to streams and rivers or in areas with a high ground water table (Holland and Keil, 1986). The structure of riparian communities within the project area is variable and alternates between dense tree thickets (riparian woodland) and open, shrub-dominated areas (riparian scrub). In addition, species composition often varies along the course of various drainages in

conjunction with changes in topography. Riparian communities are generally dominated by an overstory of arroyo willow (*Salix lasiolepis*), with some occurrence of western sycamore (*Platanus racemosa*), and American dogwood (*Cornus sericea*). Understory species include rush (*Juncus* sp.), mugwort (*Artemisia douglasiana*), poison hemlock (*Conium maculatum*), California blackberry (*Rubus ursinus*), poison oak, black nightshade (*Solanum douglasii*), and stinging nettle (*Urtica holosericea*).

Riparian habitats within the project area are associated with Los Osos Creek, and within several small drainages and swales that cross the ROW or access roads. Creek and drainage channels, and associated riparian habitats of the project area, likely qualify as Waters of the U.S., thereby falling under the jurisdiction of the Army Corps of Engineers (ACOE) jurisdiction per Section 404 of the Clean Water Act, and under CDFG jurisdiction under Section 1603 of the Fish and Game Code.

Riparian habitats support a wide diversity of wildlife due to the availability of important features such as nesting sites, escape and thermal cover, food, and dispersal corridors. Animal species which utilize willow riparian habitat including species such as striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginianus*), common garter snake (*Thamnophis sirtalis*) and various bird species. Some of the more common birds expected to nest in this habitat include, but are not limited to: Pacific-slope fly catcher (*Empidonax difficilis*), warbling vireo (*Vireo gilvus*), western scrub jay (*Aphelocoma californica*), Bewick's wren (*Thryomanes bewickii*), Wilson's warbler (*Wilsonia pusilla*) and American robin (*Turdus migratorius*).

5. Coast Live Oak Woodland

Coast live oak woodland communities are dominated by the evergreen coast live oak (*Quercus agrifolia*. In general, this community does not form a continuous belt, but rather, occurs as a mosaic closely associated with communities such as coastal sage scrub, coastal dune scrub, and annual grassland. Within the Montana de Oro portion of the ROW, coast live oak woodland is represented by the pygmy coast live oak. These pygmy oaks are unique to the Los Osos region, and typically grow as small trees with branches bent to the ground.

Understory within oak woodland is generally sparse, and includes species such as fuchsia-flowered gooseberry (*Ribes speciosum*), poison oak (*Toxicodendron diversilobum*), California chenopod (*Chenopodium californicum*), California figwort (*Scrophularia californica* ssp. *californica*), hummingbird sage (*Salvia spathacea*), and miner's lettuce (*Claytonia perfoliata*). Oak woodland habitat is scattered throughout the ROW and along various access roads proposed for use during project implementation.

Oak woodlands generally provide good habitat for a large variety of wildlife species. They also contribute woody debris to the duff in the woodland understory which provides foraging areas for small mammals and microclimates suitable for amphibians and reptiles in addition to fungi. Acorns are a valuable food source for many animal species, including acron woodpecker (*Melanerpes formicivorus*), scrub jay (*Aphelocoma corulescens*), western gray squirrel (*Scirus griseus*), and black-tailed deer (*Odocoieus emionus*).

6. Eucalyptus Woodland

Eucalyptus woodland is typically represented by dense stands of blue-gum trees (*Eucalyptus globulus*). Blue gum eucalyptus is considered an invasive plant, and the California Exotic Pest Council lists blue gum eucalyptus as a widespread aggressive invader. Plants in this genus, imported primarily from Australia, were originally planted in groves throughout many areas of coastal California as a potential source of lumber, for their use as windbreaks, and for their horticultural novelty. Stands of blue gum eucalyptus may reach 150 feet tall, towering over many tree species native to the area. In areas where eucalyptus forms dense stands, growth of native plants within their immediate vicinity is usually completely inhibited, thereby altering community structure and dynamics.

This community has limited wildlife habitat value other than roosting and nesting habitat for various bird species, and, under certain conditions, monarch butterfly. Several dense stands of eucalyptus woodland are present along the western portion of the ROW, within Montana de Oro State Park.

7. Annual Grassland

Annual grassland consists of non-native annual grasses and forbs of primarily Mediterranean origin. This community has replaced native bunchgrass species throughout the state, and is sometimes called "California annual grassland." Annual grassland is extensive throughout the eastern portion of the project area, and is dominated by non-native grasses, native wildflowers, and weedy annual forbs (broadleaf plants). Scattered occurrences of native grass species such as purple needlegrass (*Nassella pulchra*) are present within annual grassland areas along the ROW.

Typical non-native grasses present include wild oat (*Avena* spp.), soft chess (*Bromus mollis*), red brome (*Bromus rubens*), Italian rye grass (*Lolium multiflorum*), and annual fescues (*Vulpia* spp.). Typical forbs associated with grassland communities of the area include a variety of native wildflowers such as California poppy (*Eschscholzia californica*), goldfields (*Lasthenia* sp.), lupines (*Lupinus* sp.), owl's clover *(Castilleja* spp.), and blue-eyed grass (*Sisyrinchium bellum*), and non-native forbs such as summer mustard (*Hirschfeldia incana*), filaree (*Erodium* sp.), and plantain (*Plantago* sp.). San Luis Obispo owl's clover (*Castilleja densiflora* ssp. *obispoensis*), and Cambria morning-glory (*Calystegia subacaulis* ssp. *episcopalis*), are both present in annual grasslands along portions of the ROW. Both species are included on CNPS List 1B: a list of plants considered as rare, threatened, or endangered in California and elsewhere.

Raptors, such as red-tailed hawk *(Buteo jamaicensis),* white-tailed kite (*Elanus caeruleus*), barn owl *(Tyto alba),* and American kestrel (*Falco sparverius*), commonly use open grassland areas extensively for foraging purposes, while species such as western meadowlark (*Sturnella neglecta*) use open grassland areas for nesting. Reptiles which commonly breed within grassland habitats include western fence lizard, gopher snake, and western rattlesnake (*Crotalus viridis*).

8. Ruderal/Disturbed

Though not a true habitat community as defined by Holland (1986), ruderal areas are dominated by highly adaptive and invasive species with few to no native species present. Ruderal or disturbed habitat is typically found in areas altered by agriculture, construction, and other land-

clearing activities. Ruderal habitats often occur in abandoned agricultural fields, along roadsides, and in other areas experiencing repeated ground surface disturbance. Common species in ruderal habitats include veldt grass, red brome (*Bromus madritensis rubens*), wild radish (*Raphanus sativus*), Russian thistle (*Salsola iberica*), sweet fennel (*Foeniculum vulgare*), bull thistle (*Cirsium vulgare*), prickly wild lettuce (*Lactuca serriola*), bur clover (*Medicago polymorpha*), sweet horseweed (*Conyza canadensis*), and telegraph weed (*Heterotheca grandiflora*). Ruderal habitats are present along portions of the ROW and along access roads.

IV. REGIONAL SPECIES OF CONCERN

The following describes those sensitive biotic resources that which have been documented within an approximate 5-mile radius of the project study area. Sensitive biotic resources include sensitive plant, and/or animal species as described below.

A. SPECIAL-STATUS PLANT SPECIES

For the purposes of this section, sensitive plant species are defined as the following:

- Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species).
- Plants that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register Vol. 72, No. 234, pp. 69033-69106, December 6, 2007).
- Plants that meet the definitions of rare or endangered species under the CEQA (State CEQA *Guidelines*, §15380).
- Plants considered by the CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2 in California Native Plant Society, 2006).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Lists 3 and 4 in California Native Plant Society, 2006).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- Plants considered sensitive by other Federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), state and local agencies, or jurisdictions.

Based on the literature review for this project, a total of 43 sensitive plant species have been documented within the Morro Bay South and San Luis Obispo USGS quads (refer to Table 1). Because the plant species list presented in Table 1 is regional, an analysis of the range and habitat preferences of those species was conducted to identify which special-status plant species have the potential to occur within the project study area given the existing habitat, elevation, and soils present. Table 1 lists species known to be present within the project area in bold type. Of

the 43 species known from the two project quads, 4 were identified as present within the project area, and 12 were not observed although potentially suitable habitat was identified. The remaining species are considered to have no potential to occur due to lack of suitable habitat.

B. SPECIAL-STATUS ANIMAL SPECIES

For the purposes of this section, sensitive wildlife species are defined as the following:

- Animals listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species).
- Animals that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register Vol. 72, No. 234, pp. 69033-69106, December 6, 2007).
- Animals that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, §15380).
- Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5).
- Animal species of special concern to the CDFG (Remsen, 1978 for birds; Williams, 1986 for mammals).
- Animal species that are fully protected in California (California Fish and Game Code, §3511 [birds], §4700 [mammals], and §5050 [reptiles and amphibians]).

Based on a CNDDB query and a review of existing literature, a total of 33 sensitive wildlife species have been documented within a 5-mile radius of the project site. Because this list of species is regional, an analysis of the range and habitat preferences of those species was conducted to identify which sensitive wildlife species have the potential to occur within the project study area given the existing habitat. Table 2 lists species known to be present within the project area in bold type. Of the 33 species known from the two project quads, 4 were identified as present within the project area, and 15 were not observed although potentially suitable habitat was identified. The remaining species are considered to have no potential to occur due to lack of suitable habitat.

C. SENSITIVE SPECIES AND HABITATS OBSERVED DURING SURVEY EFFORTS

As presented in Tables 1 and 2, four sensitive plant species and four sensitive wildlife species were identified as present within or adjacent to the project ROW and access roads. These species are described in detail below. Sensitive habitats present within the project area include central dune scrub, central maritime chaparral, and riparian areas. These habitats are described in Section III.A of this report.

1. Plant Species

a. Arroyo de la Cruz Manzanita (*Arctostaphylos cruzensis*)

Arroyo de la Cruz Manzanita is a woody perennial shrub that occurs in coastal bluff scrub, chaparral, cismontane woodland, and coastal scrub communities. This shrub is documented as occurring in the vicinity of Hollister Peak, in the Irish Hills, and in Montana de Oro State Park. The typical flowering period for Arroyo de la Cruz is December through March. The CNPS considers this species to be rare and fairly endangered in California (List 1B.2).

Numerous Arroyo de la Cruz Manzanita are present along the ROW between MH 32.5 and MH 36.5, in coastal scrub and oak woodland habitats. No Arroyo de la Cruz manzanita are proposed for removal, but pruning of several manzanita shrubs will be necessary for equipment access for cable pull activities.

b. Morro manzanita (Arctostaphylos morroensis)

Morro manzanita is a woody perennial shrub that occurs in chaparral, cismontane woodland, coastal dune, and coastal scrub communities. Individuals of this species range from 1 to 2 meters tall, and have rough, shreddy red-brown bark. Morro manzanita has been documented as occurring in scattered locations extending from Morro Bay to Hazard Canyon. The typical flowering period for Morro manzanita is January through March. Morro manzanita is listed as a federally threatened species, but has no state listing. The CNPS considers this species to be rare and fairly endangered in California (List 1B.2).

Numerous Morro manzanita are present along the ROW from Hazard Canyon Road to MH 90F. Morro manzanita is the dominant plant species present along the route between MH 94F and MH 90F. No Morro manzanita are proposed for removal, but pruning of numerous manzanita will be necessary for equipment access for cable pull and erosion repair activities.

c. Cambria morning-glory (Calystegia subacaulis ssp. episcopalis)

Cambria morning-glory is a perennial herb in the morning-glory family (Convolvulaceae) that is endemic to California and found only in San Luis Obispo County. It primarily occurs in chaparral and woodland habitats (CNPS, 2006-2008; Hickman, 1993), but is also known to occur in grasslands on clay soils (Hoover, 1970) and in coastal scrub. It flowers from April to May. The CNPS considers this species to be rare and fairly endangered in California (List 1B.2), but it has been observed to be locally common in areas surrounding San Luis Obispo.

Cambria morning-glory is present in annual grasslands along portions of the ROW between MH 4.5 and 9.5, and east of MH 69.5. Project activities in these areas consist of driving along the ROW and adjacent ranch roads, and are not expected to impact the species.

d. San Luis Obispo owl's clover (*Castilleja densiflora* ssp. *obispoensis*)

San Luis Obispo owl's clover is an annual herb in the figwort family (Scrophulariaceae) that is endemic to California and found only in San Luis Obispo County. It is found in valley and foothill grasslands as well as meadows and seeps, sometimes on serpentine soils. It flowers from March to May. The CNPS considers this species to be rare and fairly endangered in California (List 1B.2).

San Luis Obispo owl's clover is present in annual grasslands along portions of the ROW between MH 4.5 and 9.5, and east of MH 69.5. Project activities in these areas consist of driving along the ROW and adjacent ranch roads, and are not expected to impact the species.

2. Animal Species

Suitable habitat for Morro shoulderband snail, California red-legged frog, southwestern pond turtle, and southern steelhead trout is present within the project ROW, and these four species are known to be present in the project vicinity. Morro shoulderband snail is present in coastal dune scrub habitats in Montana de Oro State Park (refer to Figure 3a). Impacts to MSS could occur during cable pulling operations and erosion repair between MH 94F and MH 109F

The Silva access road includes two unimproved crossings through Los Osos Creek, which is known to contain California red-legged frog, southwestern pond turtle, and southern steelhead trout. These species are not expected to be present within the road crossing areas due to lack of suitable habitat in the creek crossings, and the proposed project timeframe which limits work to the fall season. Detailed species and impact assessment information is presented below.

a. Morro shoulderband snail (*Helminthoglypta walkeriana*)

The Morro shoulderband snail (MSS) is a member of the land snail family Helminthoglyptidae and is most closely related to the surf shoulderband snail (*Helminthoglypta fieldii*), which occurs in coastal dune habitats south of the San Luis range to Point Arguello. The MSS is most often found associated with sandy soils of coastal dune and coastal sage scrub communities near Morro Bay. MSS is commonly associated with several species of shrubs including mock heather, seaside golden yarrow, deerweed, sand almond, and with the introduced hottentot fig. Other plants that commonly occur in areas occupied by this species include black sage, dune buckwheat, California sagebrush, dune lupine, and California croton. Typically, live MSS are found near shrubs that exhibit dense, low growth with ample contact with the ground. MSS are considered to be restricted to sandy soils generally mapped as Baywood fine sand in the Los Osos area, and are not found in coastal scrub habitats on clay soils. The USFWS listed the MSS as an endangered species under the Federal Endangered Species Act on December 15, 1994.

Impacts to MSS habitat will occur in the immediate vicinity of MH 108F and MH 107.5F, and along the Rim Trail from Hazard Canyon Road to a line west of MH 94F (refer to Figure 3A). Impacts will result from removal, driving on and over, and pruning vegetation along the cable route to provide access for cable installation and during erosion repair activities.

MH 108F and MH 107.5F are located at the edge of pavement on Sandspit Road. Access to these manholes will require a combination of pruning and tying back native vegetation, and potential relocation of any MSS found within the work area. Habitat impacts would be temporary, and would affect a total of approximately 25 square feet of coastal scrub habitat for the two manholes.

Potential MSS habitat impacts include a total of 3,248 square feet of native coastal scrub between MH 108F and 94F, and 1,753 square feet of non-native habitat (veldt grass) near MH 96F, for a total estimated MSS habitat impact of 5,002 square feet. All proposed impacts are considered to be temporary impacts involving crushing or pruning, with no permanent loss of habitat area.

The proposed impacts to suitable habitat outlined above indicate a potential for the project to result in "*take*" of MSS, as well as modification and/or degradation to known habitat for the species. Mitigation under a concurrence determination or a Habitat Conservation Plan (HCP) will be required prior to work in this area. AT&T has elected to and is currently preparing an HCP to address "take" of MSS and associated habitat for the AAG project.

b. Steelhead – south-central California coast ESU (*Oncorhynchus mykiss irideus*)

All populations of steelhead trout (SST) occurring within the California Central Coast ESU Region, which is defined as that geographic region from the Russian River, south to Aptos Creek and to, but not including, the Pajaro River (also the San Francisco and San Pablo Bay basins), were listed as federally threatened by the USFWS in 1997. Steelhead are also considered a CSC species by the CDFG. Optimal habitat for steelhead on the Pacific Coast can generally be characterized by clear, cool water with abundant instream cover (i.e., submerged branches, rocks, and logs), well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio (Raleigh et al., 1984). Steelhead are occasionally found in reaches of streams containing habitat which would be considered less than optimal. Steelhead along the central coast of California typically begin migrating up coastal drainages following the first substantial rainfall of the fall season. Spawning typically occurs during the spring in riffle areas that consist of clean, coarse gravels. Deposited eggs incubate for approximately three to four weeks, with hatched fry rearing within the gravel interstices for an additional two to three weeks. Emergent fry rear at the stream margins near overhanging vegetation. Juveniles (smolts), after rearing for one to three years within freshwater, migrate out to the ocean from March to July, as do post-spawning adults, depending on stream flows.

Steelhead trout have been documented as occurring in association with Los Osos Creek and tributary channels. This species should be considered as potentially present in riparian areas adjacent to the project ROW; however, project activities in these areas consist of driving along the ROW and adjacent ranch roads, and are not expected to impact the species. The Silva access road crosses Los Osos Creek at two unimproved crossings which consist of shallow, sandy, and rocky areas that do not provide suitable aquatic habitat for SST when water is present. During project activities in late Fall 2008, these crossings are likely to be dry, thereby further reducing the potential for impacts to the species.

c. California red-legged frog (*Rana aurora draytonii*)

The CRLF was formally listed by the USFWS as federally threatened in 1996, and is considered a CSC species by CDFG. CRLF historically ranged from Marin County southward to northern Baja California (Stebbins, 1972; 2003). Presently, Monterey, San Luis Obispo, and Santa Barbara counties support the largest remaining CRLF populations within California. The CRLF prefers aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 ft (0.7 m), and the presence of fairly sturdy underwater

supports such as cattails. The largest densities of this subspecies are typically associated with dense stands of overhanging willows and an intermixed fringe of sturdy emergent vegetation (Jennings and Hayes, 1994). CRLF typically breeds from January to July, with peak breeding occurring in February. Eggs are attached to subsurface vegetation, and hatched tadpoles require 11 to 20 weeks to metamorphose.

California red-legged frog has been documented as occurring in association with Los Osos Creek and tributary channels. This species should be considered as potentially present in riparian areas adjacent to the project ROW; however, project activities in these areas consist of driving along the ROW and adjacent ranch roads, and are not expected to impact the species. The Silva access road crosses Los Osos Creek at two unimproved crossings which consist of shallow, sandy, and rocky areas that do not provide suitable aquatic habitat for CRLF when water is present. During project activities in late Fall 2008, these crossings are likely to be dry, thereby further reducing the potential for impacts to the species.

d. Southwestern pond turtle (*Actinemys marmorata pallida*)

Southwestern pond turtle (SWPT) is considered a species of special concern by the CDFG. Pond turtles live in and near permanent waters of ponds, lakes, streams, and marshes. The ponds favored by turtles typically support emergent and floating vegetation such as cattails and algal mats with water depths from 3.0 to 5.2 ft (0.9 to 1.6 m) (Stebbins, 1972). They typically inhabit the largest and deepest pools along streams containing large amounts of basking sites, including fallen trees, boulders, or flat shorelines close to the edge of water. This species is mostly aquatic, leaving its aquatic site to reproduce, estivate, and over-winter. Pond turtles may overwinter on land or in water, but may remain active in water during the winter season. In warmer areas along the central and southern California coast, pond turtles may be active all year (Zeiner et al., 1990). This species can occasionally be found crawling across creek riffles or traversing open fields during transient movements. Upland nesting sites are required near the aquatic site, and nests are typically located in open, clay or silt slopes to ensure proper incubation temperature (Jennings and Hayes, 1994). Nesting sites may be more than 1,312 ft (400 m) from the aquatic site, but most nests are within 656 ft (200 m).

Southwestern pond turtle has been documented as occurring in association with Los Osos Creek and tributary channels. This species should be considered as potentially present in riparian areas adjacent to the project ROW; however, project activities in these areas consist of driving along the ROW and adjacent ranch roads, and are not expected to impact the species. The Silva access road crosses Los Osos Creek at two unimproved crossings which consist of shallow, sandy, and rocky areas that do not provide suitable aquatic habitat for SWPT when water is present. During project activities in late Fall 2008, these crossings are likely to be dry, thereby further reducing the potential for impacts to the species.

TABLE 1
Special-status Plant Species
Evaluated for Occurrence for the AT&T AAG Project

Common Name	Scientific Name	Status Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Potential for Occurrence
Hoover's bent grass	*Agrostis hooveri*	-- / -- / 1B.2	Chaparral, cismontane woodland, valley and foothill grassland; usually sandy soils. 60-600 meters.	April to July	• No suitable habitat occurs within the project study area. • Species was not observed during field surveys of project ROW.
Arroyo de la Cruz manzanita	*Arctostaphylos cruzensis*	-- / -- / 1B.2	Broad-leafed upland forest, coastal bluffs, closed-cone coniferous forest, chaparral, coastal scrub, and valley and foothill grassland habitats; sandy soil. 30-310 meters.	December to March	• Present along ROW between MH 32.5 and MH 36.5
Santa Lucia manzanita	*Arctostaphylos luciana*	-- / -- / 1B.2	Chaparral and cismontane woodland habitats; shale soil. 350-850 meters.	February to March	• Suitable habitat occurs within the project vicinity. • Species was not observed during field surveys.
Morro manzanita	*Arctostaphylos morroensis*	-- / -- / 1B.2	Chaparral and cismontane woodland on shale soils. 350-850 meters.	February to March	• Present in large numbers between MH 96F and MH 89F in Montana de Oro State Park.
Oso manzanita	*Arctostaphylos osoensis*	-- / -- / 1B.2	Chaparral, cismontane woodland; dacite porphyry buttes. 300-500 meters	February to March	• No potential for occurrence. • No suitable dacite soil occurs within the project vicinity.
Pecho manzanita	*Arctostaphylos pechoensis*	-- / -- / 1B.2	Closed-cone coniferous forest, chaparral, and cismontane woodland habitats; shale soil. 125-850 meters.	November to March	• Suitable habitat occurs within the project vicinity. • Species was not observed during field surveys.
dacite manzanita	*Arctostaphylos tomentosa* ssp. *daciticola*	-- / -- / 1B.2	Chaparral, cismontane woodland; dacite porphyry buttes. 100-300 meters.	March	• No potential for occurrence. • No suitable dacite soil occurs within the project vicinity. • Not expected to occur within the project vicinity.

TABLE 1
Special-status Plant Species
Evaluated for Occurrence for the AT&T AAG Project

Common Name	Scientific Name	Status Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Potential for Occurrence
Wells' manzanita	*Arctostaphylos wellsii*	-- / -- / 1B.1	Closed-cone coniferous forest and chaparral habitats; sandstone. 30-400 meters.	December to April	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
marsh sandwort	*Arenaria paludicola*	FE / SE / 1B.1	Bogs and fens along with freshwater marshes and swamps. 3-170 meters.	May to August	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
Mile's milk-vetch	*Astragalus didymocarpus* var. *milesianus*	-- / -- / 1B.2	Coastal scrub. 20-90 meters.	March to June	• Suitable habitat occurs within the project vicinity. • Species was not observed during field surveys of project ROW.
San Joaquin spearscale	*Atriplex joaquiniana*	-- / -- / 1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland; alkaline soils. 1-835 meters.	April to October	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
San Luis mariposa lily	*Calochortus obispoensis*	-- / -- / 1B.2	Chaparral, coastal scrub, and valley and foothill grassland habitat; serpentine soil. 75-730 meters	May to July	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
San Luis Obispo mariposa lily	*Calochortus simulans*	-- / -- / 1B.3	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland; sandy, granitic, serpentine soil. 395-1,100 meters	April to May	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
Cambria morning-glory	*Calystegia subacaulis* ssp. *episcopalis*	-- / -- / 1B.2	Chaparral, cismontane woodland. 60-500 meters.	April to June	Present along portions of the ROW between MH 9.5 and MH 4.5, and near MH 69.5.
San Luis Obispo sedge	*Carex obispoensis*	-- / -- / 1B.2	Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland; often serpentine seeps. 10-790 meters.	April to June	• Suitable habitat occurs within Los Osos Creek. • Species was not observed during field surveys of project ROW.

TABLE 1
Special-status Plant Species
Evaluated for Occurrence for the AT&T AAG Project

Common Name	Scientific Name	Status Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Potential for Occurrence
Congdon's tarplant	*Centromadia parryi* ssp. *congdonii*	-- / -- / 1B.2	Valley and foothill grassland habitat; alkaline soil. 1-230 meters.	May to November	• No potential for occurrence. • No suitable habitat occurs within the project ROW.
Brewer's spineflower	*Chorizanthe breweri*	-- / -- / 1B.3	Chaparral, cismontane woodland, and coastal scrub habitats. 85-1,035 meters.	May to July	• Suitable habitat occurs within the project vicinity. • Not observed during appropriately timed floristic surveys.
La Graciosa thistle	*Cirsium lonchloepis*	FE / ST / 1B.1	Coastal dunes, coastal scrub, and brackish marshes and swamps on mesic soil. 4-220 meters.	May to August	• No potential for occurrence. • No suitable habitat occurs within the project ROW.
San Luis Obispo fountain thistle	*Cirsium fontinale* var. *obispoense*	FE / SE / 1B.2	Serpentine seeps in chaparral, cismontane woodland. 35-365 meters.	February to July	• No potential for occurrence. • No suitable habitat occurs within the project ROW.
beach spectaclepod	*Dithyrea maritima*	-- / -- / 1B.2	Coastal dune and coastal scrub habitats; sandy soil. 3-50 meters.	March to May	• No potential for occurrence. • No suitable habitat occurs within the project ROW.
San Luis Obispo serpentine dudleya	*Dudleya abramsii* ssp. *bettinae*	-- / -- / 1B.2	Chaparral, coastal scrub and valley and foothill grassland habitats; serpentinite, and rocky soil. 20-180 meters.	May to July	• No potential for occurrence. • No suitable habitat occurs within the project ROW.
San Luis Obispo dudleya	*Dudleya abramsii* ssp. *murina*	-- / -- / 1B.3	Chaparral, cismontane woodland, and valley and foothill grassland habitats; serpentinite soil. 90-440 meters.	May to June	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
Blochman's dudleya	*Dudleya blochmaniae* ssp. *blochmaniae*	-- / -- / 1B.1	Coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland habitats; rocky soil, often clay or serpentine. 5-450 meters.	April to June	• Suitable habitat occurs within the project vicinity. • Not observed during appropriately timed floristic surveys.

TABLE 1
Special-status Plant Species
Evaluated for Occurrence for the AT&T AAG Project

Common Name	Scientific Name	Status Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Potential for Occurrence
San Luis Obispo owl's clover	*Castilleja densiflora* ssp. *obispoensis*	-- / -- / 1B.2	Valley and foothill grasslands. 10-400 meters.	March to May	• Present along portions of the ROW between MH 9.5 and MH 4.5, and near MH 69.5.
California saw-grass	*Cladium californicum*	-- / -- / 2.2	Meadows and seeps, marshes and swamps (alkaline or freshwater). 60-600 meters.	June to September	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
Dune larkspur	*Delphinium parryi* ssp. *blochmaniae*	-- / -- / 1B.2	Chaparral and coastal dune habitats (maritime). 0-200 meters.	April to May	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
Blochman's leafy daisy	*Erigeron blochmaniae*	-- / -- / 1B.2	Coastal dune and coastal scrub habitats. 3-45 meters	July to August	• Suitable habitat occurs within the project vicinity. • Not observed during appropriately timed floristic surveys.
Indian Knob mountainbalm	*Eriodictyon altissimum*	FE / SE / 1B.1	Chaparral, cismontane woodland, coastal scrub; sandstone soils. 80–270 meters	March to June	• No potential for occurrence. • No suitable sandstone soil occurs within the BSA. • Not expected to occur within the project vicinity.
Hoover's button-celery	*Eryngium aristulatum* var. *hooveri*	-- / -- / 1B.1	Vernal pools. 3-45 meters.	July	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
mesa horkelia	*Horkelia cuneata* ssp. *puberula*	-- / -- / 1B.1	Chaparral, cismontane woodland, and coastal scrub habitats; sandy or gravelly soil. 70-810 meters.	February to September	• Suitable habitat occurs within the project vicinity. • Not observed during appropriately timed floristic surveys.
Coulter's goldfields	*Lasthenia glabrata* ssp. *coulteri*	-- / -- / 1B.1	Marshes and swamps (coastal salt), playas, vernal pools. 1-1,220 meters.	February to June	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.

TABLE 1
Special-status Plant Species
Evaluated for Occurrence for the AT&T AAG Project

Common Name	Scientific Name	Status Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Potential for Occurrence
Jones's layia	*Layia jonesii*	-- / -- / 1B.2	Chaparral and valley and foothill grassland habitats; clay or serpentine soils. 5-400 meters.	March-May	• Suitable habitat occurs within the project vicinity. • Not observed during appropriately timed floristic surveys.
crisp monardella	*Monardella crispa*	-- / -- / 1B.2	Coastal dunes, coastal scrub. 10-120 meters.	April to August	• Suitable habitat occurs within the project vicinity. • Not observed during appropriately timed floristic surveys.
San Luis Obispo monardella	*Monardella frutescens*	-- / -- / 1B.2	Coastal dune habitats. 10-120 meters.	April to August	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
Palmer's monardella	*Monardella palmeri*	-- / -- / 1B.2	Chaparral and cismontane woodland habitats on serpentine soil. 200-800 meters.	June to August	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
adobe sanicle	*Sanicula maritima*	-- / SR / 1B.1	Chaparral, prairie, meadows and seeps, and grassland habitats; clay and serpentine soil. 30-240 meters.	February-May	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
black-flowered figwort	*Scrophularia atrata*	-- / -- / 1B.2	Associated with closed cone conifer forest, chaparral, coastal dune, coastal scrub, and riparian scrub habitats. Diatomaceous shales. 10-500 meters.	March to July	• Suitable habitat occurs within the project vicinity. • Not observed during appropriately timed floristic surveys
chaparral ragwort	*Senecio aphanactis*	-- / -- / 2.2	Chaparral, cismontane woodland, and coastal scrub habitats; alkaline soil. 15-800 meters.	January to April	• Suitable habitat occurs within the project vicinity. • Not observed during appropriately timed floristic surveys.
Cuesta Pass checkerbloom	*Sidalcea hickmanii* ssp. *anomala*	-- / SR / 1B.2	Closed-cone coniferous forest on serpentinite soil. 600-800 meters	May to June	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.

TABLE 1
Special-status Plant Species
Evaluated for Occurrence for the AT&T AAG Project

Common Name	Scientific Name	Status Federal/ State/CNPS Status & Threat Code	General Habitat Description	Blooming Period	Potential for Occurrence
most beautiful jewel-flower	*Streptanthus albidus* ssp. *peramoenus*	-- / -- / 1B.2	Chaparral, cismontane woodland, and valley and foothill grassland habitats; serpentinite soil. 110-1,000 meters.	April to June	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
San Bernardino aster	*Symphyotrichum defoliatum*	-- / -- / 1B.2	Cismontane woodland; coastal scrub; lower montane coniferous forest; meadows/seeps; marshes and swamps; valley and foothill grassland (vernally mesic); near ditches, streams, springs. 2-2040 meters.	July to November	• No potential for occurrence. • No suitable habitat occurs within the project study area. • Species was not observed within the project study area during field survey.
California seablite	*Suaeda californica*	FE / -- / 1B.1	Marshes and swamps (coastal salt) 110-1,000 meters.	April to June	• No potential for occurrence. • No suitable habitat occurs within the project vicinity.
saline clover	*Trifolium depauperatum* var. *hydrophilum*	-- / -- / 1B.2	Marshes and swamps, valley and foothill grassland (mesic, alkaline), and vernal pools. 0-15 meters	July to October	• No potential for occurrence. • No suitable habitat occurs within the project ROW.

Status Codes:
Federal:
FE = Federally Endangered
FT = Federally Threatened

State:
SE = State Endangered
ST=State Threatened
SR = State Rare

California Native Plant Society (CNPS):
List 1B = rare, threatened, or endangered in California and elsewhere.
List 2 = rare, threatened, or endangered in California, but more common elsewhere.

Threat Code:
.1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Fairly endangered in California (20-80% occurrences threatened)
.3 = Not very endangered in California (<20% of occurrences threatened or no current threats known)

TABLE 2
Special-status Wildlife Species
Evaluated for Occurrence for the AT&T AAG Project

Common Name	Scientific Name	Status Federal/State /Other	General Habitat Description	Potential for Occurrence
Invertebrates				
Morro shoulderband (=banded dune) snail	*Helminthoglypta walkeriana*	FE / -- / --	Restricted to the coastal strand in the immediate vicinity of Morro Bay; inhabits the duff beneath *Happlopappus*, *Salvia*, *Dudleya*, and *Ericameria*	• Present in dune scrub and coastal scrub habitats in Montana de Oro portion of project site (see Figure 3A).
Monarch butterfly	*Danaus plexippus* (wintering sites)	-- /-- / *	Coastal eucalyptus and Monterey cypress stands.	• Potential for wintering sites in eucalyptus habitat. • Species was not observed during field surveys.
vernal pool fairy shrimp	*Branchinecta lynchi*	FT / -- / --	Vernal pools, usually less than 0.05 acres in size; swales or basalt flow depression pools in unplowed grasslands.	• No suitable habitat occurs within the ROW. • No potential for occurrence.
Fish				
Tidewater goby	*Eucyclogobius newberryi*	FE / -- / CSC	Brackish shallow lagoons and lower stream reaches where water is fairly still, but not stagnant.	• No suitable habitat occurs within the ROW. • No potential for occurrence.
Steelhead – south-central California coast ESU	*Oncorhynchus mykiss irideus*	FT,CH / -- / CSC	Optimally, clear, cool water with abundant instream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	• Present in Los Osos Creek. • Steelhead are known to inhabit Los Osos Creek, which crosses the project ROW.
Amphibians				
California tiger salamander	*Ambystoma californiense*	FT / -- / CSC	Grassland or open woodland habitats, shallow ephemeral, semi-permanent, or occasionally permanent pools and ponds that fill during winter rains.	• No suitable habitat occurs within the ROW. • No potential for occurrence.
California red-legged frog	*Rana aurora draytonii*	FT / -- / CSC	Aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of fairly sturdy underwater supports such as cattails.	• Present in Los Osos Creek. • CRF are known to inhabit Los Osos Creek, which crosses the project ROW.
Western spadefoot	*Spea hammondii*	-- / -- / CSC	Vernal pools in grassland and woodland habitats.	• No suitable habitat occurs within the ROW. • No potential for occurrence.
Coast Range newt	*Taricha torosa torosa*	-- / -- / CSC	Breed in ponds, reservoirs, and slow-moving streams. Frequent terrestrial habitats.	• Potential for occurrence in Los Osos Creek. • Species was not observed during surveys.

TABLE 2
Special-status Wildlife Species
Evaluated for Occurrence for the AT&T AAG Project

Common Name	Scientific Name	Status Federal/State /Other	General Habitat Description	Potential for Occurrence
Reptiles				
Southwestern pond turtle	*Actinemys marmorata pallida*	-- / -- / CSC	Quiet waters of ponds, lakes, streams, and marshes. Typically in the deepest parts with an abundance of basking sites.	• Present in Los Osos Creek. • Pond turtle are known to inhabit Los Osos Creek, which crosses the project ROW.
black legless lizard	*Anniella pulchra nigra*	-- / -- / CSC	Sandy or loose loamy soils (dunes) under sparse vegetation. Soils with high moisture content.	• Potential of occurrence in coastal dune scrub habitat. • Species was not observed during field surveys.
silvery legless lizard	*Anniella pulchra pulchra*	-- / -- / CSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. Prefer soils with high moisture content.	• Potential of occurrence in coastal dune scrub habitat. • Species was not observed during field surveys.
Coast (California) horned lizard	*Phrynosoma coronatum (frontale)*	-- / -- / CSC	Coastal sage, chaparral, annual grasslands, oak woodland, riparian woodland, and coniferous forest. Typically in loose, fine soils, with a high sand fraction.	• Potential of occurrence in coastal scrub and woodland habitats. • Species was not observed during field surveys.
Birds				
Cooper's hawk	*Accipiter cooperii*	-- / -- / CSC	Typically broken riparian woodlands in canyons and floodplains usually below 6,000 ft.	• Potential for occurrence in riparian habitat along Los Osos Creek. • Species was not observed during field surveys
Sharp-shinned hawk	*Accipiter striatus*	MBTA / -- / CSC	Ponderosa pine, blue oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian habitats	• Potential for occurrence within riparian habitat as an infrequent forager. • Species was not observed during field surveys.
tricolored blackbird	*Agelaius tricolor*	MBTA / -- / CSC	Open water, tall and dense cattails or tules. Large nesting colonies near cropland and insect prey base.	• Potential for occurrence within riparian habitat for breeding. • Species was not observed during field surveys.

TABLE 2
Special-status Wildlife Species
Evaluated for Occurrence for the AT&T AAG Project

Common Name	Scientific Name	Status Federal/State /Other	General Habitat Description	Potential for Occurrence
burrowing owl	*Athene cunicularia*	MBTA / -- / CSC	Open, dry grasslands, deserts, and scrublands with low-growing vegetation. Subterranean nester, dependent upon burrowing mammals.	• Potential for breeding and foraging within grassland habitat. • Species was not observed during field surveys.
ferruginous hawk	*Buteo regalis*	MBTA / -- / CSC	Open grasslands, sagebrush flats, desert scrub, low foothills, and pinyon-juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice.	• Potential for occurrence within grassland habitat as an infrequent forager. • Species was not observed during field surveys.
Western snowy plover	*Charadrius alexandrinus nivosus*	FT, MBTA /--/CSC	(Nesting); sandy marine and estuarine shores.	• No potential nesting habitat within the ROW. • No potential for occurrence.
western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FC / SE / --	Forests to open riparian woodlands with thick understory.	• Not known to occur within the area. • Marginal riparian nesting habitat occurs along Los Osos Creek.
white-tailed kite	*Elanus leucurus*	MBTA / FP / --	Open grasslands, meadows, or marshlands for foraging close to isolated dense-topped trees for nesting and perching.	• Potential for occurrence within riparian and grassland habitats as an infrequent forager. • Species was not observed during field surveys.
California horned lark	*Eremophila alpestris actia*	MBTA / -- / CSC	Short grass prairie, hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	• Potential for presence in grassland habitat. • Species was not observed during field surveys.
California black rail	*Laterallus jamaicensis coturniculus*	MBTA / ST, FP	Mainly inhabits salt marshes bordering larger bays. Occurs in tidal salt marsh on pickleweed; also in freshwater and brackish marshes, all at low elevation.	• No suitable habitat occurs within the ROW. • No potential for occurrence.
California clapper rail	*Rallus longirostris obsoletus*	FE, MBTA / SE, FP	Salt-water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.	• No suitable habitat occurs within the ROW. • No potential for occurrence.
California least tern	*Sterna antillarum browni*	FE, MBTA /SE / --	(Nesting colony); nests on open, sandy or gravelly shores near shallow-water feeding areas in estuaries.	• No suitable habitat occurs within the ROW. • No potential for occurrence.

TABLE 2
Special-status Wildlife Species
Evaluated for Occurrence for the AT&T AAG Project

Common Name	Scientific Name	Status Federal/State /Other	General Habitat Description	Potential for Occurrence
Other nesting birds	Class Aves	MBTA / --/ CDFG Code Section 3503	Various habitats (nesting).	• Potential nesting habitat is present in eucalyptus and oak trees along the ROW.
Mammals				
Townsend's big-eared bat	*Corynorhinus townsendii*	-- / -- / CSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	• No suitable roosting habitat occurs in the ROW • Not expected to occur within the project area.
pallid bat	*Antrozous pallidus*	-- / -- / CSC	Inhabits deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	• Marginal roosting habitat occurs within the ROW. • Not expected to occur within the project area.
western mastiff bat	*Eumops perotis californicus*	-- / -- / CSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	• Marginal roosting habitat occurs within the ROW. • Not expected to occur within the project area.
big free-tailed bat	*Nyctinomops macrotis*	-- / -- / CSC	Low-lying arid areas in southern California. Needs high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	• No suitable roosting habitat occurs in the ROW. • Not expected to occur within the project area.
American badger	*Taxidea taxus*	-- / -- / CSC	Most abundant in drier open stages of shrub, forest, and herbaceous habitats, with friable soils; needs sufficient food, friable soils, and open uncultivated ground; preys on burrowing rodents; digs burrows.	• Potential habitat within grassland habitats. • Neither species nor burrows were observed during field surveys.
Morro Bay kangaroo rat	*Dipodomys heermanni morroensis*	FE / SE	Inhabits coastal scrub vegetation on old sand dune substrate around Morro Bay. Thought to inhabit just one small privately-owned parcel in Los Osos. This species may be extinct.	• Very unlikely to be present within the ROW. • Not expected to occur in the project area.
San Diego desert woodrat	*Neotoma lepida intermedia*	-- / -- / CSC	Coastal scrub of southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. Particularly abundant in rock outcrops and rocky cliffs and slopes.	• Potential habitat within coastal scrub habitat. • Neither species nor dens were observed during field surveys.

TABLE 2
Special-status Wildlife Species
Evaluated for Occurrence for the AT&T AAG Project

Common Name	Scientific Name	Status Federal/State /Other	General Habitat Description	Potential for Occurrence
Status Codes: *Federal:* FE = Federal Endangered FT = Federal Threatened CH = Federally Designated Critical Habitat MBTA = Protected by Federal Migratory Bird Treaty Act *State:* SE = State Endangered ST = State Threatened			*California Department of Fish and Game:* CSC = California Special Concern Species CDFG Section 3503 = Protected by Section 3503 of CDFG code * = not formally listed, but included in CDFG's "Special Animals" list.	

V. REGULATORY OVERVIEW

A. ENDANGERED SPECIES ACT OF 1973

The Federal Endangered Species Act (FESA) provides legislation to protect federally listed plant and animal species. Impacts to listed species resulting from the implementation of a project would require the responsible agency or individual to formally consult with the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NOAA Fisheries) to determine the extent of impact to a particular species. If the USFWS or NOAA Fisheries determines that impacts to a species would likely occur, alternatives and measures to avoid or reduce impacts must be identified.

The project area has potential to contain several federally protected aquatic and amphibian wildlife species (refer to Tables 1 and 2), and contains one federally listed plant species (Morro manzanita). Any federally listed species potentially present within the project area are protected under FESA requirements.

B. SECTION 404 OF THE CLEAN WATER ACT OF 1977

Regulatory protection for water resources throughout the United States is under the jurisdiction of the Army Corps of Engineers (ACOE). Section 404 of the Clean Water Act prohibits the discharge of dredged or fill material into Waters of the U.S. without formal consent from the ACOE. Waters of the U.S. include Special Aquatic Sites (e.g., marine waters, tidal areas, stream channels) and wetlands. Under Section 404, actions in Waters of the U.S. may be subject to either an individual permit or a general permit, or may be exempt from regulatory requirements. Impacts to sensitive biological resources are assessed as part of the permit process by the U.S. Fish and Wildlife Service. Project access routes cross Los Osos Creek and two tributary channels on existing ranch roads on the Silva property. Per the 1990 County of San Luis Obispo Conditions of Approval, AT&T must have "written permission" from federal and state agencies to cross these waters between October 15th and June 1st.

C. CALIFORNIA ENDANGERED SPECIES ACT

The State of California Endangered Species Act (CESA) ensures legal protection for plants listed as rare or endangered, and species of wildlife formally listed as endangered or threatened. The state also lists California Species of Concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Under state law, the CDFG is empowered to review projects for their potential to impact state-listed species and Species of Special Concern, and their habitats. Impacts to state-listed species would be evaluated and implementation of detailed mitigation measures would likely be required.

The project area has potential to contain several state listed wildlife species and sensitive habitat types (refer to Tables 1 and 2). Any state listed species and habitats potentially present within the project area are protected under CESA requirements.

D. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) was enacted by the California Legislature in 1970 to provide a system of checks and balances for land use, development, and management decisions for projects approved by public agencies. CEQA applies to all California government agencies, and requires a lead agency to analyze the potential environmental effects of proposed projects under its jurisdiction. CEQA grants public agencies the authority to require feasible changes in proposed projects to lessen or avoid significant environmental impacts. CEQA also provides a regulatory basis for protection of sensitive species and habitats not addressed under the State and Federal Endangered Species Acts, and establishes a framework for impact assessment and mitigation requirement determination by the lead agency for a proposed project.

Impacts to sensitive species that do not have state or federal status must be addressed under CEQA. All CNPS List 1B plant species potentially present within the project area are protected under CEQA requirements (refer to Table 1).

E. CALIFORNIA COASTAL ACT

The California Coastal Act was enacted in 1976 to provide long-term protection of California's coastal resources. The Act's coastal resources management policies are based on recommendations contained in the California Coastal Plan. One such policy includes:

> "*Protection, enhancement and restoration of environmentally sensitive habitats, including intertidal and nearshore waters, wetlands, bays and estuaries, riparian habitat, certain wood and grasslands, streams, lakes, and habitat for rare or endangered plants or animals*."

The coastal dune scrub, maritime chaparral, coastal scrub, and riparian areas identified on Figures 3A-D constitute environmentally sensitive habitats as defined by the California Coastal Act. Any proposed impacts to these habitats must conform to Coastal Act/Local Coastal Plan requirements.

F. SECTION 1603 OF THE FISH AND GAME CODE

The CDFG is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the law requires any person, state or local government agency, or public utility proposing a project that may impact a river, stream, or lake to notify the CDFG before beginning the project. If the CDFG determines that a project may adversely affect existing fish and wildlife resources, a Lake or Streambed Alteration Agreement is required. A Streambed Alteration Agreement lists the CDFG conditions of approval relative to the proposed project, and serves as an agreement between an applicant and the CDFG for a term of not more than five years for the performance of activities subject to this section. Any disturbance of riparian areas other than utilization of existing road crossings may require a CDFG 1603 agreement. Project access routes would cross Los Osos Creek and two tributary channels on existing ranch roads on the Silva property. Per the 1990 Conditions, AT&T must have written permission from CDFG to cross these waters after October 15.

G. OTHER SECTIONS OF THE FISH AND GAME CODE

Fully Protected and Protected species may not be taken or possessed without a permit from the Fish and Game Commission and/or the CDFG. Information on these species can be found within section 3511 (birds), section 4700 (mammals), section 5050 (reptiles and amphibians), and section 5515 (fish) of the Fish and Game Code. Any species of nesting birds, their eggs, and/or their active nests may not be disturbed per section 3503 of the Fish and Game Code.

Nesting bird surveys and avoidance of active nests may be required prior to any removal of eucalyptus or other tree species during the typical nesting season (February 15-September 1).

H. MIGRATORY BIRD TREATY ACT OF 1918

The Migratory Bird Treaty Act (MBTA) protects all migratory birds, including their eggs, nests, and feathers. The MBTA was originally drafted to put an end to the commercial trade in bird feathers popular in the latter part of the 1800's. The MBTA is enforced by the USFWS, and potential impacts to species protected under the MBTA are evaluated by the USFWS.

Removal of eucalyptus or other trees during the typical nesting season could result in direct and indirect impacts to migratory bird species, and may require nesting bird surveys and avoidance of active nests.

VI. BIOLOGICAL IMPACT SUMMARY

Biological impacts identified during this analysis include impacts to coast live oak trees, disturbance of riparian areas along roadways, the potential to create or increase erosion hazards along the project route and access roads, and the potential to impact special-status plants and wildlife during project construction. Potential biological impacts associated with the proposed project are summarized in Table 3, and are discussed in detail below.

A. OAK TREES

Project access by trucks, cable trailers, tractors, and other necessary equipment will impact coast live oak trees along the ROW and access roads by damaging overhanging branches. No areas requiring oak tree removal were identified during this analysis; all impacts noted would consist of pruning overhanging branches to allow access. The total number of oaks damaged, and the severity of that damage, will depend on which portions of the ROW and which access roads are utilized, and the height and width of the equipment used for project construction. In most cases, pruning can be accomplished with hand tools such as pole saws and pole pruners immediately prior to vehicle access. The ROW at MH 28.5, and portions of the Boam access road, may require chainsaw use to remove several larger oak branches. The 1990 HAW-5 Conditions of Approval (D900132D) specifically address oak tree impacts in section D.20.a.1-10. This section requires avoidance where possible, oak pruning to reduce impacts prior to vehicle access, and mitigation planting for oaks impacted by pruning or vehicle damage. The 1990 County of San Luis Obispo Conditions of Approval specify a 5:1 replacement ratio for all oak trees removed by the project, but do not specify a ratio for impacts to trees from pruning. Subsequent fiber optic cable installation projects have utilized a 2:1 ratio for such oak tree trimming impacts, and this ratio is recommended to be implemented for the proposed project.

B. RIPARIAN AREAS

Project access by trucks, cable trailers, tractors, and other necessary equipment would cross Los Osos Creek and two small tributary channels on the Silva property, using existing unpaved road crossings that pass directly through the creek and drainage channels (refer to Figure 3). Los Osos Creek is known to contain sensitive aquatic species, including California red-legged frog, steelhead trout, and Southwestern pond turtle. The creek crossings are regularly used by ranch vehicles and consist of shallow, sandy, or rocky bottom areas with no vegetation or habitat for aquatic species. During the fall timeframe proposed for project construction, these crossings are likely to be dry or have extremely low water levels during the work effort. The 1990 HAW-5 Conditions of Approval specifically address impacts to Los Osos Creek and stream crossings, wetlands, and fisheries in section B, and in section D.20.d.1. These sections require monitoring, avoidance, erosion control, and revegetation of any impacts, and limit project-related creek crossings to the normal dry period between June 1st and October 15th except where prior written permission has been granted by state and federal agency representatives.

C. EROSION

Project access by trucks, cable trailers, tractors, and other necessary equipment along the ROW and access roads could cause or create erosion control issues on steep road sections, and on steep grassy slopes that are not typically used as roadways. Repeated vehicle travel would reduce existing plant cover, and could loosen or disturb soils, thereby increasing the potential for erosion to occur. The project is proposed for construction immediately prior to the start of the rainy season, and will require measures be implemented to reduce erosion potential during and following construction. The 1990 HAW-5 Conditions of Approval address erosion control in detail in sections B and C. These sections require implementation of temporary and permanent erosion control measures, preparation of site-specific restoration plans, seasonal restrictions on work activities, reestablishment of vegetative cover in disturbed areas, and installation of erosion control structures where necessary.

D. SPECIAL-STATUS SPECIES

The proposed project will require pruning of two special-status shrubs (Morro and De la Cruz manzanita) to provide access along the project ROW. Pruning and vehicle access will also disturb habitat for the federally endangered Morro shoulderband snail. CNPS List 1B plant species San Luis Obispo owl's clover and Cambria morning glory are present in grasslands along portions of the ROW. As discussed above, Los Osos Creek is known to contain sensitive aquatic species, including California red-legged frog, steelhead trout, and Southwestern pond turtle. The 1990 HAW-5 Conditions of Approval address identification and protection of special-status species in sections B and D, and provide detailed requirements for restoration and revegetation of sensitive plant species disturbed by the project in Section D. The need to prune sensitive manzanita for access along the Rim Trail within Montana de Oro State Park is addressed in Section D.20.f.2 (County of San Luis Obispo Conditions of Approval), which required the original project to remove eucalyptus canopy as permanent mitigation for ongoing manzanita impacts during future maintenance activities along the trail. The eucalyptus canopy removal that was implemented as mitigation in 1991 was intended to serve as a long-term mitigation strategy for future manzanita disturbance, including the proposed AAG project.

VII. PROJECT COMPLIANCE WITH EXISTING CONDITIONS OF APPROVAL

As proposed, the current project is similar to the 1994 TPC-5 and 1998 China/US cable installation activities, and will utilize the same access routes, equipment, methods, and sensitive species avoidance and mitigation measures. No new construction or significant deviation from previously performed activities is proposed, other than the addition of one new access route. This route is the Twissleman road, a private dirt/gravel road that begins at Prefumo Canyon Road and provides access to Manholes 28 ½ to 19 (refer to Figure 3D). This road provides a shorter and more direct route than previously used access roads, and will significantly reduce oak impacts. No improvement to this road is necessary.

Impacts identified during this analysis are similar to those resulting from previous activities, and are confined primarily to disturbance of coastal scrub/Morro shoulderband snail habitat, and pruning of Morro manzanita, De la Cruz manzanita, and coast live oak trees. No trees or manzanita are proposed for removal, and no excavation or grading other than minor roadway improvements is proposed. Mitigation for impacts to Morro shoulderband snail has been proposed in coordination with State Parks and the USFWS, and any soil disturbance areas or potential erosion sources will be reseeded and repaired immediately following project construction.

As detailed above in Section VI, the 1990 HAW-5 Conditions of Approval contain detailed Environmental Mitigation Measures requiring funding of an environmental monitor, environmental training for project staff, compliance with all agency permit requirements, preparation of a revegetation-restoration plan, erosion control, and detailed avoidance and exclusion measures for all sensitive species and habitats within the project area, including Morro shoulderband snail. These Conditions consist of County-required measures and mitigation measures proposed by AT&T. The 1990 Conditions covered all aspects of cable installation activities along the ridge route for the 1991 HAW-5, 1994 TPC-5, and the 1998 China/US cable pull activities.

Based on our review of the current project description, our impact analysis based on biological surveys throughout the project area, and review of project activities and 1990 County of San Luis Obispo Conditions of Approval for previous actions in 1991, 1994, and 1998, it appears that biological aspects of the current project could be adequately addressed by implementation of the measures required by the 1990 Conditions. If AT&T can complete the project within the requirements of the 1990 Conditions of Approval, further review or additional County permits would not be necessary.

TABLE 3
AT&T AAG Project Biological Impacts Summary

Segment	Segment Access Routes	Oak Trees	Riparian Areas	Erosion Potential	Special-status Species
Station to MH 4.5 & Pullbox *(Figure 3D)*	AT&T Station Along ROW	N/A	ROW crosses a seasonal drainage with no permanent riparian vegetation present. No impacts if work done under dry conditions.	minor	CNPS List 1B plant species San Luis Obispo owl's clover and Cambria morning glory are present in grasslands along the ROW.
MH 9.5 to MH 15 *(Figure 3D)*	Knecht Plumbing Along ROW	N/A	N/A	minor	CNPS List 1B plant species San Luis Obispo owl's clover and Cambria morning glory are present in grasslands along the ROW.
MH 19 to MH 30.5 *(Figures 3C and 3D)*	Twissleman Spradlin Jorgensen Along ROW	*ROW*: Access to MH 28.5 would impact 15 oaks if the ROW is used. Access to MH 28.5 from the west side of the ROW would only impact 8 oaks. Access to MH 30.5 will impact 2 oaks. *Access Roads*: Use of Spradlin access road would impact 3 oaks Use of Jorgensen access road would impact 1 oak Use of Twissleman access road would impact 8 oaks	N/A	Steep hills/grassy slopes may require reseeding with annual grasses	N/A
MH 32.5 to MH 36.5 *(Figure 3C)*	Along ROW and immediately adjacent roads on Swift property	*ROW*: Access between MH 36.5 & MH 34.5 would impact 12 oaks Access between MH 34.5 & MH 32.5 would impact 8 oaks	N/A	minor	CNPS List 1B plant species De la Cruz Manzanita is present along the ROW between MH 32.5 and MH 36.5. Pruning will be required for vehicle access along the ROW.
MH 36.5 to MH 42 *(Figure 3C)*	Beecham Swift (adjacent to ROW) Along ROW	N/A	ROW crosses seasonal drainage. No impacts if work done under dry conditions.	Steep hills/grassy slopes may require reseeding with annual grasses	N/A
MH 45 to MH 51 *(Figure 3B)*	California Coast Properties Along ROW	*ROW*: Access between MH 47.5 & MH 51 would impact 5 oaks Impacts can be avoided by use of side road to east	N/A	ROW to MH 45 may require reseeding with annual grasses	N/A
MH 55 to MH 64 *(Figure 3B)*	Boam Along ROW	*Boam/ROW*: Access between MH 55 and 64 would impact 39 oaks	N/A	Steep hills/grassy slopes may require reseeding with annual grasses	N/A
MH 69.5 to MH 74 *(Figure 3B)*	Silva Along ROW	*Access Roads*: Access to MH69.5 to MH 82 would impact 10 to 20 oaks along the Silva access road. Impact numbers depend on the height of equipment traveling the road.	The Silva access road crosses Los Osos Creek twice, and crosses two tributary channels. No riparian vegetation is present in the crossings.	Steep hills/grassy slopes may require reseeding with annual grasses	CNPS List 1B plant species San Luis Obispo owl's clover and Cambria morning glory are present in grasslands along the ROW near MH 69.5. Impacts to aquatic species at creek crossings are unlikely, particularly if work is done in late fall when water levels are low.
MH 79.5 to MH 92F *(Figure 3A)*	Silva Along ROW	None (included above along Silva access road)	None (included above along Silva access road)	Steep hills may require reseeding with annual grasses	Dense stands of the federally protected Morro manzanita are present along the ROW between MH 90F and MH 92F. Pruning of Morro manzanita will be required for vehicle access along this segment.
MH 92F to MH 96 *(Figure 3A)*	Silva Hazard Canyon Road Along ROW NOTE: Access between manholes is restricted to vehicles less than 72 inches wide in this segment.	None (included above along Silva access road)	None (included above along Silva access road)	Repair of existing erosion along ROW will be conducted as part of the project.	Coastal scrub habitat for the federally endangered Morro shoulderband snail is present between MH 94F and 96. Pruning of coastal scrub will be required for vehicle access along this segment. Dense stands of the federally protected Morro Manzanita are present between MH 92F and MH 96. Pruning of Morro manzanita will be required for vehicle access along this segment.
MH 96 to MH 107F *(Figure 3A)*	Hazard Canyon Road Along ROW	N/A	N/A	minor	Coastal scrub habitat for the federally endangered Morro shoulderband snail is present between MH 96 and MH 107F. Pruning of coastal scrub will be required for vehicle access along this segment. Federally protected Morro manzanita present between MH 96 and Hazard Canyon Road. Pruning of Morro manzanita will be required for vehicle access along this segment.
MH 107F to MH 109F *(Figure 3A)*	Sandspit Road and Parking Lot	N/A	N/A	None-project access is from paved road and parking lot.	Coastal scrub habitat for the federally endangered Morro shoulderband snail is present between MH 107F and MH 109F. Pruning of coastal scrub will be required for vehicle access along this segment.

VIII. REFERENCES

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ATTACHMENT A

- Photo Documentation

Photo 1: View along access to MH 69F from Hazard Canyon Road. Impacts to coastal scrub and MSS habitat are necessary to allow vehicle travel along the ROW to MH 96F, and possibly MH94F and 92F. Picture taken on April 18 2008.

Photo 2: View west along the ROW west of MH 92F. Note dense Morro manzanita along edges of trail, and erosion along ROW. Significant pruning of Morro manzanita would be required to allow vehicle access along this portion of the route. Picture taken on April 18 2008.

PHOTO DOCUMENTATION

Photo 3:

View of oak trees on ROW at MH 28.5. Oak impacts can be reduced in this area by driving on adjacent grasslands and accessing the manhole only from the west side. Picture taken on April 28, 2008.

Photo 4:

View of one of the two Silva Ranch road crossings of Los Osos Creek. Note shallow gravel bottom and lack of vegetation in road crossing. These crossings are generally dry in late summer and fall. Picture taken on April 25, 2008.

Photo 5:

View of horse corral on Silva Ranch proposed for use as a contractor laydown area. The corral has been used for this purpose during previous cable projects. Note weedy vegetation in the currently unused corral area. Picture taken on April 25, 2008.

Photo 6:

View west along ROW toward MH 34.5. Note Arroyo de la Cruz manzanita along the narrow ROW. Pruning for access should be minimized in this area. Picture taken on May 15, 2008.

Photo 7:

View east along ROW from MH 30.5. Note steep hills along ROW, and potential for erosion following construction activities. Picture taken on April 28, 2008.

Photo 8:

View along ROW looking east toward MH 45. Note vegetative regrowth along ROW since the last cable pull project. Any road improvements necessary for access along this section should incorporate erosion control measures. Picture taken on April 29, 2008.